

What is claimed is:

- 5 1. A method comprising:  
generating a compressed medical image from a source medical image;  
transmitting the compressed medical image to a remote view station for  
display;  
selecting a region of the displayed medical image; and  
applying image analysis operations to a region of the source medical image  
corresponding to the selected region of the compressed medical image.
- 10 2. The method of claim 1 wherein transmitting the compressed medical image includes  
transmitting the compressed medical image over a global packet-switched network.
- 15 3. The method of claim 1 and further including transmitting region information from the  
remote view station to an image server, wherein the region information defines the  
selected region of the displayed medical image.
4. The method of claim 3, wherein the region information is a series of pixel  
coordinates.
- 20 5. The method of claim 1, wherein applying the image analysis operations includes  
outputting a score and communicating the score to the remote view station for  
display.
- 25 6. The method of claim 1 and further including receiving a diagnosis from the remote  
view station and associating the diagnosis with the source medical image in a  
database.
- 30 7. The method of claim 1, wherein selecting the region of the compressed medical  
image includes receiving input from a pointing device controlled by a user to outline  
the region of the compressed medical image.

8. The method of claim 1, wherein generating a compressed medical image includes applying a compression algorithm that reduces data losses that are detectable with human vision.

5 9. The method of claim 8, wherein generating a compressed medical image includes applying a JPEG compression algorithm.

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10 10. A system comprising  
an image server storing a source medical image;  
a remote view station communicatively coupled to the image server to receive  
a compressed version of the source medical image, wherein the remote view station  
includes an input device for selecting a region of the compressed medical image, and  
further wherein the image server applies an image analysis operation on a region of  
the source medical image that corresponds to the selected region of the compressed  
15 medical image.

20 11. The system of claim 10, wherein the remote view station transmits region information  
from the remote view station to the image server, wherein the region information  
includes a plurality of pixel coordinates outlining the selected region of the  
compressed image.

25 12. The system of claim 10, wherein the image server applies the image analysis  
operations to generate a score and communicates the score to the remote view station  
for display.

13. The system of claim 10, wherein the image server includes a database associating a  
diagnosis received from the remote view station with the source medical image.

30 14. The system of claim 10, wherein the remote view station includes a pointing device  
controllable by a user to outline the region of the compressed medical image.

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File 7 15. A computer program, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

5 generate a compressed medical image from a source medical image;  
transmit the compressed medical image to a remote view station for display;  
receive region information from the remote view station, wherein the region information defines a region within the compressed medical image; and  
apply image analysis operations to a region of the source medical image as a function of the region information.

10 16. The computer program of claim 15 and further including instructions to cause the processor to transmit the compressed medical image over a global packet-switched network.

15 17. The computer program of claim 15 wherein the region information is a series of pixel coordinates.

18. The computer program of claim 15 and further including instructions to cause the processor to output a score and communicating the score to the remote view station for display

20 19. The computer program of claim 15 and further including instructions to receive a diagnosis from the remote view station and associate the diagnosis with the source medical image in a database.

25 20. The computer program of claim 15 and further including instructions to apply a compression algorithm that reduces data losses that are detectable with human vision.

30 21. A computer-readable medium having a data structure stored thereon comprising:  
a data field identifying a source medical image;  
a data field identifying a compressed version of the source medical image; and  
a data field storing an output score from an image analysis operation applied to a region of the source medical image.

22. The computer-readable medium of claim 21, wherein the data structure includes a data field associating a diagnosis with the source the medical image.

23. A method comprising:  
compressing a source medical image at a compression level;  
transmitting the compressed medical image to a remote view station for display;  
receiving region information from the remote view station, wherein the region information defines a region of the compressed medical image; and  
compressing a region of the source medical image at a second compression level as a function of the region information.

24. The method of claim 22 wherein transmitting the compressed medical image includes transmitting the compressed medical image over a global packet-switched network.

25. The method of claim 23, wherein the region information is a series of pixel coordinates.

26. The method of claim 23 and further including receiving a diagnosis from the remote view station and associating the diagnosis with the source medical image in a database.

27. A method comprising:  
transmitting a medical image to a remote view station for display;  
receiving region information from the remote view station, wherein the region information defines a region of the displayed medical image; and  
locally applying an image processing operation at the image server to a region of the source medical image as a function of the region information.

28. The method of claim 27 wherein transmitting the medical image includes transmitting the medical image over a global packet-switched network.

29. The method of claim 27, wherein the region information is a series of pixel coordinates.

5 30. The method of claim 27, wherein transmitting the medical image includes compressing medical image.